vol. 71; July-Dec. 1933

Electrical West

Published by McGraw-Hill Company of California

San Francisco

Index to Volume LXXI

Illustrated articles are designated by an asterisk (*), editorials by a dagger (†).

(Note: Owing to different method of pagination in this volume, it is necessary to use an abbreviation before the page number of each item to indicate the month in which it appeared.)

PAGES BY ISSUES

July J1-J40
August A1-A44
September S1-S48
October O1-O74
November N1-N48
December D1-D44

A

Air Conditioning:
- Air-Conditioned Home Attracts 5,312 People, *D9.
- Central Plant, *J8.
- Hot and Cold Running Air, *O25.
- Lemon Storage Air Conditioned, N29.
- Los Angeles Holds Air-Conditioning Show, J3.
- Market Possibilities, J10.
- Money in the Air, J5.
- Theory and Practice, J5.
- Unit Types, *J6.

Arizona:
- Funds Allocated for Project in Arizona, D36.

B

Behind the Button, *O56.

Books, New:
- Conduction of Electricity in Gases, by Joseph Slepian, N31.
- Direct and Alternating Current, by E. A. Loew, N31.
- Public Utility Rate Structures, by L. R. Nash, N31.
- Symmetrical Components, by Charles F. Wagner, N31.
- Telephone Theory and Practice, Vol. II, by Kempster B. Miller, N31.
- What Electricity Costs, edited by Morris Llewellyn Cooke, N31.

Bonneville Project:
- Worked Started on Bonneville Dam, D37.
- Work Starts on Bonneville Project, N40.

Boulder Dam:
- Bids Called for Generators, A39.
- Bids Opened for Boulder Generators, S33.
- Boulder Generator Contracts Awarded, N43.
- Contracts Let for Boulder Line Towers, S33.
- Ohio Brass Gets Big Insulator Contract, O67.
- Welding Boulder Penstock Pipes, *N41.

C

Cable:
- Service Cables on Electric Dredges, by G. Duncan, *D27.

California:
- Fair Trade Act Gets "Teeth", J3.

California Oregon Power Co., The:
- Rural Load Grows in Copco Territory, S11.

Central Valley Water Project:
- Referendum Proceedings Instituted, S33.
- To Vote Dec. 19 on California Water Plan, N40.
- Century of Progress, Turning the Electric Eye on a, *A19.

Chicago World's Fair:
- Turning the Electric Eye on a Century of Progress, *A19.

Christmas:
- Appliance Society Organizes Drive, *D2.
- Christmas Selling Ideas, *D6.
- Sandy Claus, †D1.

Coast Counties Gas & Electric Co.:
- To Get Appliances off the Shelf, S5.

Columbia River: (See Grand Coulee Project and Bonneville Project.)

Contractors: (See also Electrical Contractors' Assn. of Northern California and Electrical Contractors and Dealers Assn. of Southern California.)
- Contractors Hold Industry Picnic, *J32.
- New Chapter N.E.C.A. Formed in South, D33.

Convention in Print, †J1.

Cronin Distributing, Inc.:
- Store Door Display Room, *J12.

D

Denver:
- Denver Notes Pickup in Electrical News, N32.

Diesel Electric Power:
- Diesels at Vernon, *N18.

E

East Bay Municipal Utilities District:
- East Bay District Plans Power Project, O63.

Electric Appliances: (miscellaneous.)
- Appliances Feature Furniture Mart, *S4.
- Electrical Gifts That Will Make Living Better, *O44.
- Furnishings Week Includes Appliances, J2.
- Odd Comparisons, *O28.
- Plot Your Sales, *A9.
- To Keep the Background for Living a Bright One, *O24.
- Toys That Teach, *O16.

Electric Dredge:
- A Floating Power House, by Robert O. Brosemer, *A16.
- Service Cables on Electric Dredges, by G. Duncan, *D27.

Electric Drive Makes Gravel Plant Portable, *D30.

Electric Heating:
- Hot and Cold Running Air, *O25.

Electric Ironers:
- Ironer Demonstrators on Call, D4.
- The Washboard's Rock Pile is Taboo, *O20.

Electric Kitchens:
- All Lines Point Toward the Kitchen Sink, *O61.
- Kitchen Reborn, *O10.

Electric Ranges:
- Cookery Competition, †N1.
- Cookery Council Exhibits at Fair, *N4.
- Farmers Prefer Ranges of Incinerator Type, S7.
- Makes Quota for Seventh Year, A5.
- Many Will Try Rentals, J12.
- Range Campaign Features $10 Wiring, N7.
- Theater Cooking Schools Play to Full Houses, *S5.

Vitamin Cookery, *O12.
- Westerners Win in Range Contest, S7.

Electric Refrigeration:
- Distributors Told Need of Retail Stores, D8.
- Get Ready for Refrigeration Week, A10.
- How Fresno Did It, *A10.
- In the Kitchen, Where Half of Her Hours are Lived, *O13.
- Prizes Announced for Refrigerator Displays, N7.
- Prizes Announced for Refrigeration Week, S7.
- Refrigeration Bureau Goes on the Air, J2.
- Refrigerator Sales Approach 1,000,000, O64.
- Refrigerator Sales Up, A4.

Electric Washers:
- And Now the Home Laundry, *D4.
- From House to Block, *N7.
- May Co. Breaks Washer Sales Record, J2.
- The Washboard's Rock Pile is Taboo, *O20.

Electric Water Heating:
- Advantages of Off-Peak Water Heating, by A. C. McMicken, D10.
- Off-Peak Water Heating as a System Load Builder, D9.
- Off-Peak Water Heating Market Possibilities, by S. P. McFadden, D10.
- Off-Peak Water Heating Performance Analyzed, by George M. Palo, *D18.
- Typical Off-Peak Water Heating Rate, D11.

Electric Welding:
- Large Pipe Line is Field Welded, *D41.
- Welding Boulder Penstock Pipes, *N41.

Electric Wiring:
- Pipe—Wire, *O50.

Electrical Appliance Society of Northern California:
- Appliance Society Organizes Drive, *D2.

Electrical Contractors & Dealers Assn. of Southern California:
- New Chapter N.E.C.A. Formed in South, D33.

Electrical Leagues:
- San Quentin Engineer Heads Marin League, *J35.

Electrical League of Colorado:
- Colorado League Will Publish Booklet, S7.
- Denver League Issues Consumer Magazine, O63.

Electricity's Gifts Make Living Better, *O33.

F

Fairs and Shows:
- Air-Conditioned Home Attracts 5,312 People, *D9.
- Appliances Feature Vancouver Show, N5.
- Merced Dealers Make Radio Progress, D2.
- Tie Appliances and Radio in Show, *N5.
- Cookery Council Exhibits at Fair, *N4.

Farm, Electricity on the:
- Rural Sales Handbook Issued, S11.
- Rural Short Course Set for Dec. 4-6, N43.

Federal Power Commission:
- Edison—San Joaquin Hearings Adjourned, O64.
- Hearing to Test Federal Power Act, S32.

TK1
.E495

Floodlighting:
Modernize Old Fountain, *N29.
Rent Garden Party Lighting, J17.

Frigidaire Corp.:
Frigidaire Changes Northwest Distribution, S14.

G

Grand Coulee Project:
Allotment of $1,000,000 Received, O62.
Columbia Basin Project to Start, A39.
Contracts Will Be Awarded May 15, 1934, D39.
Grand Coulee Dam Will Cost $63,000,000, S32.
Public Works or Public Waste, †S48.
Utility Protests High Dam at Grand Coulee, N40.

H

Hamilton Field:
Contractor Develops Underground Idea, *N26.

Hoover Dam: (See Boulder Dam.)

Hospitals:
Electrified Hospital Stood the Quake, J15.
Los Angeles Hospital Installation Costs $840,890, by E. G. Brueggeman, *S25.

I

Idaho Power Co.:
To Erect 30-Mile Line in Nevada, S35.

Illuminating Engineering Society:
Optometrists and I.E.S. Meet at U.C., D40.

K

Kennett Project: (See Central Valley Water Project.)

L

Lighting: (See also Floodlighting, Stadium and Street Lighting.)
Better Light—Better Sight, *S8.
Better Light—Better Sight, *N8.
Every Customer to be Surveyed, *N10.
Floodlighting Gets New Load, N9.
House Plants Thrive When Lighted, *S9.
Industry to Sell Better Lighting, A5.
Lighting—A Real Sales Opportunity, by R. M. Alvord, S9.
Monthly Sales Activity Pays, N8.
Re-Lamping Campaign Gets Results, N9.
Standard Lighting Recommendations Made, N9.
The Light to See—Costs Less Than the Book You Enjoy Under It, *O48.
Visual Demonstration Found Effective, N8.

Los Angeles:
Los Angeles Hospital Installation Costs $840,890, by E. G. Brueggeman, *S25.

Los Angeles Bureau of Power and Light:
Bids Called for Steel Towers, J34.
Contracts Let for Boulder Line Towers, S33.
Hollow Cable for Boulder Line, *J34.
Large Pipe Line is Field Welded, *D41.
Theater Cooking Schools Play to Full Houses, *S5.

Los Angeles Department of Water and Power:
Los Angeles Buys Mono Basin Properties, N43.
Los Angeles to Buy Mono Basin Lands, A39.

M

Map Roller Speeds Dispatching, *N29.

Merchandising, Power Company-Dealer:
Anti-Merchandising — Law Unconstitutional, J3.
"Please Sell," †A44.

Meters and Metering:
Meter Box Developed for New Meter Sequence, by O. W. Holden, *J27.
Special Bench Speed Tests on Rotating Standards, by George H. Logan, *A29.

Moisture Content of Dried Fruit Measured, *N28.

Montana Power Co.:
250-Mile Line is Proposed in Montana, D36.

Motor Forum:
Merchandising Machinery, *J31.
Modernized Pumping Pays for Itself, by W. R. Chawner, *S27.
"Second-Hand" is Not Necessarily "Second-Rate," by R. H. Dachner, A32.
Sell Tools at Christmas, *D31.
We Sink or Swim as Motor Shops, on Customer Service, by J. C. Morrello, *N30.

Motors and Motor Shops:
High-Speed A.C. Drive for Multiple-Unit Presses, by G. L. Beaver, *S20.

N

National Electric Cookery Council:
Westerners Win in Range Contest, S7.

National Electrical Refrigeration Bureau:
Dr. Allison Tours Far Western States, N4.
Prizes Announced for Refrigerator Displays, N7.
San Diego Wins Prize, D2.

National Electrical Wholesalers' Assn.:
Wholesalers Discuss Proposed Code, S35.

National Recovery Administration:
A Swift Summary of Developments on Codes Affecting Western Electrical Business, N2.
Codes to the Right of Them—Codes to the Left of Them—in the West, S2.
Profits are Trumps, †J40.
Public Works or Public Waste, †S48.
Restoring Confidence, †A44.
What About Prices?, †S48.
What's Doing in the West, A2.
What the Industrial Recovery Act Means to You, J22.
Western Development During November, D15.
Working in Harness, †N48.

Northern California Retail Electrical Appliance Society:
To Form Retail Appliance Society, A5.

Northwest Electric Light & Power Assn.:
July Annual Meeting Planned, J36.
Northwest Association Announces Reorganization Plans and Program, *S32.
Northwest Assn. Organizes for Work, *D40.
Northwest Engineers Plan Organization, O70.
Rural Sales Handbook Issued, S11.
Wisdom, †S1.

Northwestern Electric Co.:
Northwestern Case Still Being Heard, D39.
Northwestern Rate Order Withdrawn, J34.

O

Off-Peak Water Heating: (See Electric Water Heating.)

Oregon:
Northwestern Case Still Being Heard, D39.
Oregon to Vote on State Power Bill, J35.

Ordinances:
L. A. Ordinance Goes "Specific", S26.
New Code Adopted in San Francisco, A30.

P

Pacific Coast Electrical Assn.:
Employee Educational Campaign, D8.
P.C.E.A. Holds Annual Meeting, A39.

Pacific Coast Electrical Bureau:
Bureau Elects New Directors, J36.
No Hessians Wanted, D8.
P.C.E.B. Holds Conclave in L. A., D8.

Pacific Gas and Electric Co.:
California Commission Orders Lower Return, D36.
Makes Quota for Seventh Year, A5.
Utility to Testify in P.W.A. Power Loan, O67.

Pasadena Municipal Light & Power Department:
Pasadena to Build Substation, A39.

Playing Fields, Floodlighting, of:
Denver's Sundodgers, *J16.

Photo-Electric Cells:
Photo-Cell Operates Fountain, *O64.

Portland:
Portland's New Mayor Discusses Utilities, A38.

Portland General Electric Co.:
Pepco Stock Returned to Oregon Holders, J37.

Public Ownership:
Another Oregon Power District Proposed, J35.
Bone Bill to go on Ballot, J35.
Brawley Votes Municipal Plant, J35.
Ketchikan, Alaska, Votes $1,000,000 Bond Issue, D36.
Oregon Power Bill not on Ballot, A40.
Oregon to Vote on State Power Bill, J35.
Plans Submitted for S. F. Distribution, S33.
Salt Lake to Vote on Municipal System, O62.
Salt Lake Votes Against Municipal Ownership, D39.
San Francisco Beats Power Bond Issue, D36.
San Francisco to Vote on Municipal System, N41.
Still Cautious, †D1.

Public Relations:
Enlist the Owners, †N48.

Puget Sound Power & Light Co.:
Port Angeles Rates are Reduced, A40.
Rate Cut Opposed by Puget Sound, S33.

R

Range Wiring:
Range Campaign Features $10 Wiring, N7.

Rates:
Arizona Edison Gets Injunction, D39.
Behind the Button, *O56.
California Commission Orders Lower Return, D36.
Fill 'er Up, *O32.
More Northwest Rates Under Investigation, J35.
Northwestern Rate Order Withdrawn, J34.
Phoenix Hires Rate Expert, J34.
Port Angeles Rates are Reduced, A40.
Rate Cut Opposed by Puget Sound, S33.
Rural Rates Low in Washington, O64.
Seattle Would Waive Minimum Charge, J34.
6.6 Per Cent Return for California Utilities, A39.
Street Lighting Rates Subject of Survey, J35.
Utah Electric Rates to be Investigated, D37.
Washington Court Overrules Commission, D36.
Washington Rural Rates Reduced, S33.
Washington to Reduce Street Lighting Rates, N41.
Washington Utilities Must File Budgets, D37.

Regulation:
Community Interdependence, †A44.
Regulation Needs Defending, †D44.
Utility Condemnation Under Fire, A38.
Washington Utility Salaries to be Aired, O62.

Rocky Mountain Electrical Assn.;
Rocky Mountain Assn. Sponsors Sales Drive, D6.
Rocky Mt. Convention Set for September, A41.
Rocky Mountain States Start Business Drive, N44.

S

Sacramento Municipal Utility District:
Receives Allotment of $11,700,000, O62.

Salt Lake:
Salt Lake to Vote on Municipal System, O62.
Salt Lake Votes Against Municipal Ownership, D39.

HBR 26/III/35

San Diego:
Tie Appliances and Radio in Show, *N5.

San Francisco:
Plans Submitted for S. F. Distribution, S33.
San Francisco Beats Power Bond Issue, D36.
San Francisco Plans Power Development, A38.
San Francisco to Vote on Municipal System, N41.

Seattle Electric Club:
Cutter Wins Seattle Golf Trophy, J36.
Seattle Club Elects Officers, N43.

Seattle Light Department:
Engineers Report on Seattle Plant, A39.

Silver Creek Project: (See Sacramento Municipal Utility District.)

Southern California Edison Co. Ltd.
Edison Launches $1,000,000 Program, N4.
Edison Launches Its "New Deal," *D3.
Edison—San Joaquin Hearings Adjourned, O64.
Hearing to Test Federal Power Act, S32.
Plans for 1934, †N48.
Utility Condemnation Under Fire, A38.

Southern Sierras Power Co., The:
Pole Line Moved by Ingenious Method, *D22.

Sports Lighting: (See Playing Fields and Stadium Lighting.)

Stadium Lighting:
Vancouver, B. C., Lights Ball Park, N25.

Steam Plant Development:
Synchronizing With 220-Kv. Breakers, by O. R. Bulkley and A. A. Kroneburg, *J24.

Sun Lamps:
Winter's Electric Sunshine—on tap, *O17.

Sunnyvale Air Base:
Underfloor Duct at Sunnyvale Air Base, *S25.

Surplus Power—A Sales Opportunity, †D44.

Synchronizing With 220-Kv. Breakers, by O. R. Bulkley and A. A. Kroneburg, *J24.

T

Taxation:
California Sales Tax is Confusing, S4.

Taxation: (Continued)
California Votes Riley Tax Plan, J34.
Discrimination, †S1.
Enjoin Spokane Utility Tax, N43.
Federal Tax Shifted to Utilities, J35.
Municipal Utilities Protest Tax, A40.
Seattle Utility Tax up to Supreme Court, A39.
Spokane 3 Per Cent Tax Opposed, S35.
Spokane Utilities Compromise Tax, D41.
Tick Tax Toe, †S1.
Utilities are Tax-Gatherers in Idaho, D40.
Utility Tax Increase Proposed in Oregon, D37.
Wasington Tax Suit Delayed, N41.

Transmission and Distribution:
Contractor Develops Underground Idea, *N26.
Hollow Cable for Boulder Line, *J34.
Numbering of Rural Poles Possesses Many Advantages, by Roy E. Wenk, *S21.
Pole Line Moved by Ingenious Method, *D22.
Practical Maintenance Economy Measures, D25.

Tulare, Calif.:
Utility Condemnation Under Fire, A38.

U

Underfloor Duct:
Underfloor Duct at Sunnyvale Air Base, *S25.

University of California:
New Bear Cave (gymnasium lighting), *D28.

Utah Power & Light Co.:
Utah Electric Rates to be Investigated, D37.

V

Vernon, Calif.:
Diesels at Vernon, *N18.

W

Washington:
Bone Bill to go on Ballot, J35.
More Northwest Rates Under Investigation, J35.
Washington Court Overrules Commission, D36.
Washington Utilities Must File Budgets, D37.
Washington Utility Salaries to be Aired, O62.
Washington Utility Valuations Start, D39.

Wawona Tunnel:
Puncturing Inspiration Point, *J28.

Western Furniture Exchange:
Appliances Feature Furniture Mart, *S4.

Westinghouse Electric & Manufacturing Co.:
Westinghouse Coordinates, A13.

Window Displays:
Mickey Mouse Sings, *N4.

Y

Yakima Park, Complete Electrification for, by R. D. Waterhouse, *J26.

Yosemite National Park:
Puncturing Inspiration Point, *J28.

▼

Personal

Arbogast, G. E., S29.

Badrian, B., D14; Bakewell, George, Jr., *J18; Brown, Claude C., N34; Buck, G. B., *N44.

DeJongh, Ivan L., N12.

Foy, Fred C., D12; Fulford, Tom D., O73.

Green, D. C., O68; Greisser, Victor H., N34.

Harvey, W. C., *N12; Heston, Walter C., D33; Hibbard, M. L., *O68; Hibben, S. G., D14.

Kelley, C. A., J32; Kerr, F. M., A40; Koiner, C. W., N44.

Larkin, Fred G., J32.

Markee, E. P., *J36; McDonald, Robert F., D33; Miller, Verne M., N12; Munro, J. C., A40.

Robinson, K. M., O68; Rogers, Harry S., S29.

Sweeney, A. M., D14.

Thomas, Harry M., *J18; Turner, Arthur J., N34.

Veit, Arthur, *J32; Vinet, Pierre, D12.

Walsh, Walter J., N32; Wheat, W. W., N12; Wilcox, Raymond, *N34; Winter, W. L., D33.

Obituary

Jordan, J. Charles, *A40.

Lawrie, Charles L., D33; Leurey, Louis F., *A34.

Ward, George C., *062.

Authors' Index

A

Page

Alvord, R. M. Lighting—A Real Sales Opportunity.....S9

B

Beaver, G. L. High Speed A.C. Drive for Multiple-Unit Presses...*S20
Brosemer, Robert O. A Floating Power House *A16
Brueggeman, E. G. Los Angeles Hospital Installation Costs $840,-890 .....*S25
Bulkley, O. R. and A. A. Kroneburg. Synchronizing With 220-Kv. Breakers *J25

C

Chawner, W. R. Modernized Pumping Pays for Itself.....*S27

D

Page

Dachner, R. H. "Second-Hand" is not Necessarily "Second-Rate"....A32
Duncan, G. Service Cables on Electric Dredges *D27

H

Holden, O. W. Meter Box Developed for New Meter Sequence....*J27

K

Kroneburg, A. A. and O. R. Bulkley. Synchronizing With 220-Kv. Breakers *J25

L

Logan, George H. Special Bench Speed Tests on Rotating Standards *A29

M

Page

McFadden, S. P. Off-Peak Water Heating Market Possibilities.....D10
McMicken, A. C. Advantages of Off-Peak Water Heating.....D10
Morrello, J. C. We Sink or Swim as Motor Shops, on Customer Service *N30

P

Palo, George M. Off-Peak Water Heating Performance Analyzed...*D18

W

Waterhouse, R. D. Complete Electrification for Yakima Park.....*J26
Wenk, Roy E. Numbering of Rural Poles Possesses Many Advantages *S21

HQR 26/III/35